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To the Secretary
FEDERAL COMMUNICATIONS COMMISSION
Washington DC

In the Matter of:
Petition by the United States Department of Transportation for Assignment of an Abbreviated Dialing Code (N11) to Access Intelligent Transportation System (ITS) Services Nationwide

File No. NSD-L-99-24
CC Docket No. 92-105

7/8/99
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Comment from SmartRoute Systems in support of the Petition for an Abbreviated Dialing Code to Access ATIS services Nationwide.

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Dear FCC,

In a petition filed March 8, 1999, the US Department of Transportation requested assignment of an Abbreviated Dialing Code for Advanced Traveler Information Systems. This comment is in support of such an assignment.

The petition takes note of Advanced Traveler Information Systems (ATIS) as being helpful to travelers both in motor vehicles and using transit. It illustrates that these services can be used to reduce congestion and therefor pollution levels simply by providing information to commuters allowing them to make better choices. The petition irrefutably notes that ATIS are in place in a large number of markets but in only a few cases are there simple easy-to-remember dialing numbers available. In only one area, Greater Cincinnati/Northern Kentucky, is there a single, 3-digit N11 cross-platform number for both wireless and landline callers. The petition also notes that it is very rare that a single numbering scheme is in place for more than a single market, and where it does extend to multiple markets, it is only available for cellular/wireless users.

A Clear Public Need, A Clear Public Benefit

It is our opinion that an N11 assignment by the FCC for ATIS services will serve the public good by eliminating confusion in the areas where Traveler Information Services are available by telephone, and could serve to promote the use of and expansion of these services. Assignment of an N11 will also eliminate possible conflicts in areas that do not have such services currently, by providing a ready access point to these services as they become available.

Assignment of an N11 for ATIS services will allow and perhaps require the assignee to create standards to which ATIS services must adhere in order to apply for the N11 number *through the assignee*. This, in addition to eliminating the current confusion in the proliferation of phone numbers, will help establish a more uniform expectation of a level of service for the users. Anyone who uses a telephone is aware of the type of information or service they will receive when calling 411 or 911, an N11 for Traveler Information will enable the establishment of a standard level of service a user would expect when dialing for Traveler Information as well.

Additionally, the standards having been set by USDOT and oversight provided by local the DOT, would not preclude a *private* firm from deploying an Advanced Traveler Information System. As long as they meet the standards for the ATIS, they can be awarded use of the N11.

ATIS Services – Definition And Satisfaction

Currently, ATIS services are far more than just clearing houses for randomly configured information or simply a pass-through to other services such as towing companies or construction offices. ATIS services offer deep menu structures allowing callers to retrieve *route specific* and *multi-modal* traveler information *on demand*. A caller may choose from a list of available information directly on the service for *current* (i.e. *real time)* conditions (both traffic and transit) or pre-planning information such as construction or event information. Additionally, these services are used as gateways to other *real time* traveler information such as; airport arrival and departure information, transit schedules and fares, ride sharing and even parking availability and rates. All through a single access point. The issue is, and has been, finding a phone number that callers can remember and use in multiple markets to retrieve such information.

In markets where ATIS services are available, the clear issue is gaining more users, much of which can be attributed to phone number retention. User satisfaction with service is very high.

A soon to be released evaluation of the **Washington DC** *SmarTraveler*® service by George Mason University in, stated that:

- 87% of callers to the service Saved Time on their commute
- 92% Avoided Problems by using the service
- 85% felt that they Reduced Anxiety by just having the information received in their call to *SmarTraveler*®

A survey of **Boston** *SmarTraveler*® users, conducted by Mutli-Systems in 1995 revealed that:

- 97% of users expected to use the service again.
- 85% of users rated the service "8" or better on a scale of "10."
- 68% reported reduced frustration as a consequence of using the service.
- 67% indicated that SmarTraveler provided all types of information that they desired from a traveler information service.
- 63% reported the ability to avoid traffic problems.
- 59% reported that they saved time.

A study by California Partners For Advanced Transit And Highways at the University of California (Berkeley) of TravInfo™ users in the **San Francisco** Bay Area in 1998 shows:

- An overwhelming majority of the callers were satisfied with the information they obtained from TATS; both traffic and transit survey groups gave high marks to the service.
- 60.4% of callers found that TATS traffic information was more useful, reliable and accurate than radio traffic reports
- 35.6% said they valued the service because it allowed them to save time
- 32.2% valued the service because it allowed them to choose the best route to avoid congestion
- 17.8% valued the service because it reduced stress
- 46.7% of those who learned about traffic problems from TATS changed their travel behavior.

In one very revealing question:

- 98.3% of the traffic survey group and 88% of the transit group said they would use TATS in the future because of its easy access to information via a single telephone number

This single 7-digit number schema is now being undermined by new area code splits and overlays in the Bay Area, putting this last notation in jeopardy.

Clear Public Benefit

In 1995, SmartRoute Systems launched the *SmarTraveler*® Information Service in Cincinnati. Users of the service were required to remember two different phone numbers, one for wireless/cellular and one for landline. Though the service number for landline was an easy one to remember, 333-3333, and wireless/cellular a simple 311, the service garnered only moderate, level usage with calls averaging 52,000 calls per month in 1996 and 1997. In March of 1998, (concurrent with the FCC designation of 311 for non-emergency police dialing), *SmarTraveler*® Cincinnati changed it's dialing code to 211 uniformly for both wireless/cellular *and* landline callers. Call counts in 1998 surged averaging over 87,000 calls per month with a high of over 106,000 calls in April of that year. Clearly the utility and need for a unified abbreviated dialing code was proven by increased use and therefor increased information flow to travelers. The information being delivered, and marketing methods for the service had not changed. The higher call volumes, continued use and growth point directly to the ease of remembering the phone number.

The *SmarTraveler*® service in Boston began in 1993 with three (3) separate numbers, one for landline, 374-1234, and a separate number for *each* of the two cellular providers. Additionally, though there were only two area codes in the Boston area at the time, callers still needed to remember where they were calling from in order to access the service. A call forwarding message was required for callers from the area outside of Boston informing them to dial 11 digits instead of seven. The confusion led to an under utilization of a publicly sponsored (Massachusetts Highway Department) service. A single number for the two cellular providers was implemented in 1995, and more wireless providers began offering the service to their customers over the past two years. Each of the new wireless providers agreed to provide access to *SmarTraveler*® through the same unified, abbreviated dialing code. Call counts are now as high as 405,608 in a single month (June 1999), yet there is still a clear 8-1 ratio of

wireless/cellular callers using the unified dialing code, vs. landline callers who must remember a 7 or 11 digit number, depending on which of the four area codes they are calling from. The benefit is obvious and direction clear. There needs to be a simple number in place to gain full usage of these Traveler Information Services which themselves serve the public good.

Confusion with 911?

911 call centers are already inundated with non-emergency calls from the public, to the point that the FCC established a non-emergency police number, 311. A concern that has been raised that the addition of *another* N11 number might lead to more calls to 911 from people looking for traffic information. However, 911 operators are already fielding a large number of these calls already. The addition of an N11 for ATIS services may in fact be a benefit to 911, drawing non-emergency calls away from 911 centers to ATIS services where they belong.

One reason people may be calling 911 for things other than emergencies, is that they cannot remember the number they *should* be calling for information. Assigning an N11 to ATIS services may actually help to alleviate some of this problem.

Cellular And Wireless Use

The petition states that some cellular and wireless companies have already chosen to allow abbreviated access through their switches. It should be noted that the Cellular Telephone Industry Association has only within the past two years established their own guidelines about the use of # and * numbers. There are, however, wireless and PCS providers that have their own *limitations* on the use of these keys. There is no clear direction for wireless and cellular providers to develop or limit the use of # and * numbers, or whether they should uniformly allow or develop the ability to access abbreviated numbers without these codes (i.e. three digit, or N11 numbers). An assignment by the FCC of an Abbreviated Dialing Code for ATIS services would help set overall guidelines for all communications services and aid in developing Advanced Traveler Information Services as the cross-platform service it currently needs to be. Uniform cross-platform dialing is seamlessly integrated in only one area currently, Cincinnati. As noted above, the user base and call volume has risen since implementation in 1998 on both the landline *and* cellular side even though the uniform code has been in place on the cellular side since 1995.

Additionally, though wireless providers may currently allow access through abbreviated dialing codes to ATIS services, such as to the *SmarTraveler*® service, they are doing so by creating a "pointer" code which sends a call to a 7 or 10 digit number. Negotiation for these wireless/cellular codes is currently done on a city by city, and provider by provider basis. With no designation either for landline or wireless, defining an Advanced Traveler Information number in a market means negotiating with each individual provider, with no guarantee that a uniform number will be available for all providers. One provider may be able to point from #211 to an ATIS service, but another may already have that code in use for other services. If this case were drawn to it's extreme, there might be as many as five or six *separate wireless* numbers in a market leading to the *same* Advanced Traveler Information service. Still another number or numbers (+/- area codes) for landline callers will add more confusion for users trying to gain quick access to vital information for their travels.

A decision by the FCC designating an N11 for ITS services may not be a mandate for wireless providers, but would be a major step to guiding them into creating a seamless network of ATIS services nationwide.

Wireless Safety Or A Simple Plan

Much has been said about mobile calling safety. But with programmable telephones, one might argue that a frequent user could program their phone to dial a number regardless of length eliminating the need for an abbreviated code. However, one must first *remember* the number, and that the number *will likely be different* depending on the market one lives or works in. Remembering a number in one city is simple, but if one travels outside of the local area, for instance between Washington DC and Baltimore or Philadelphia and New York, it becomes much more difficult. Add in the seemingly annual reallocation of area codes, and the likelihood that a Traveler Information Service's number might change at some point along the way, and it becomes nearly impossible to be assured that the call you are making will get you to the ATIS service, or that it will get you to the service you are looking for geographically. A single N11 designation will solve for these issues.

In a letter to the Chairman on February 25, 1999 Mr. Rodney Slater notes that there are eleven different numbers in use for Traveler Information in the New York – Washington corridor. By this small example, we can easily see that remembering where the caller is, and therefor what number should be called, is even more troublesome than any speed dial telephone could handle. The Traveler Information Services in question are designed to provide *quick and easy* access to current information. Requiring users to remember and choose from a series of numbers *in addition to* requiring them to remember what area code they are in at that moment in time, is too time consuming and frustrating and is a major barrier to usage. All this without stating that commuters traveling from Hartford to Manhattan, for example, might not even be *aware* of the area codes they are passing through.

Are There 7-Digit Options?

Specifically noted are issues regarding area code splits and overlays. A single 7-digit number, such as those currently available in Boston or San Francisco, would require users to dial the area code *if* they were calling from outside of the area where the system or a system access point resides. However, this may not mean that they are outside the area where they are looking for information.

Example: A commuter living west of Boston may actually be only 7 miles from the city, but must dial an 11-digit *landline* number before leaving home, to get information on their commute to work. Before leaving work, they must dial the corresponding 7-digit landline number, *without the area code,* to retrieve information on their ride home. In the event they have a stop along the drive in either direction, they must be aware of what area code they are in to determine whether or not they need the extra 3-4 digits (toll call and long distance)for another landline call. Were there to be an abbreviated wireless number available to them, they would have to remember that number as well.

In Oakland California the Metropolitan Transportation Commission is undergoing a process of re-evaluation of the TravInfo™ telephone number. Left unchecked come October, callers to TravInfo™ in the 510, and other new are codes in Oakland, will be required to dial 11-digits for their traveler information, as Pacific Bell will be instituting mandatory 1+10-digit dialing in that area. Meanwhile, callers across the Bay in San Francisco would *not* be required to dial more than the 7-digits they are dialing today. This confusion for the users, along with the headaches for marketing a service with more than one number configuration, is why MTC is looking for other solutions.

An N11 number would allow *all* users *equal access* to the ATIS service allowing for maximum use and maximum benefit of the services offered. The business of directing the call could be handled seamlessly through agreements with local telephone companies, the Traveler Information Service Providers, and the local DOT.

555-XXXX Alternatives

Some have noted the recent availability of 555-XXXX numbers, and that they will not be effected by area code splits or overlays, that these numbers are specifically exempted from the mandatory 10 (or 11) digit dialing requirements (reference: *Uniform National Dialing Plan*, Industry Numbering Committee).

In this case, and if so mandated, 555 numbers would become the single number solution of choice. No other number guarantees the same (last) seven digits in every geographic area selected. As this may be a good thing on first blush, one must realize the other side of the issue, that of marketing an ATIS number that is both different, and the same as *many* other numbers.

It has been noted that there are 9,890 number combinations available in 555-XXXX, and only 3,500 assigned to date. This directs us to the issue of the uniqueness of an N11 number and why it should be assigned for ATIS services. Regardless of the number chosen in a 555-XXXX system, the service or services are faced with the advance knowledge that the number selected will be surrounded with similar numbers, without regard to the nature of the services they provide. In fact, it may only be a matter of a few years before any number of services will reside in the 555 pool, some charging fees to the callers and many overlapping in the services they offer. Some, or perhaps many, may be providing ATIS services, but without DOT oversight for quality of service or fee structure. That there *will* be 9,899 *other* numbers with a 555 exchange, any of which *could* provide lesser quality, fee based Traveler Information Services is reason enough to say that the 555 exchange will *not* be unique and argues for assigning an N11 to ATIS. Just think about how many 800, 888 and 976 numbers there are in use today.

Regarding 555 service availability in larger geographic areas, 555 service plans are designed for *local* numbering plans. A geographic area that crosses a LATA may not be able to use a 555 service tariff as defined by the FCC. Philadelphia, for example, has commuters coming from across the river in New Jersey. Callers from "the other side" of the LATA would have to be served through some other long distance service in order to have their calls carried across to the ATIS provider on "the other side" of the LATA. As currently defined, rate structures can even differ within a region. Each local ATIS operator would have to argue a process and tariff with the local telephone carriers to define, or more the point *redefine* a tariff for the service.

Additionally, that these 555 numbers *do not* require dialing an area code, could in fact be a deterrent to marketing the number. As more areas are requiring 10 or 11 digit dialing, imagine the marketing nightmare competing with local telephone companies who are reminding users that they must dial an area code. Meanwhile, a 555 service provider is trying to inform users that they should only dial 7 digits. The positive of having a unified number could quickly be replaced by the negative of having to confront any number of advertising campaigns.

This is not to say that a 555 number might not be a viable option in a single metropolitan area, where marketing can be focused and precise. But the uniqueness of the number will soon be compromised by the availability of similar numbers, and the inability of the ITS industry, FCC, USDOT or local telephone providers to monitor these services. Certainly this is not the solution for a National ATIS number.

What about 800/888/877 Toll Free?

Toll Free service always comes to mind when thinking about a single number solution. Can we simply make this an 800/888/877 number and be done with it? Perhaps, but there may already be existing tariff issues and other implementation roadblocks that could foul the deck before things get moving. Tariffs in local service areas are different by themselves with LECs all trying to better the deal of the next. The issues that would come to bear might be good for competition, or bad for government dealings. That there are tariffs in place for Toll Free might pose more of a problem than starting from scratch for a national standard.

For example: If the Commission were to designate a certain 800/888/877 number for ATIS, it would have to be a nationwide number. Likely, there would be the familiar arguments of whether it should spell a word, or if it should be a series of easy to remember numbers. There might also *already* be significant competition for the number sequence. As Toll Free service has been in place for quite a while, and has been running out of numbers as well, we can assume that the bulk of the "good number" are taken.

If the Commission were to find an acceptable number, then it would be designated on a national level, but it would have to be implemented locally. That would mean that the local assignee would have to choose a competitive carrier, and bargain for rates. Also Toll Free Services have been around for a while, and just like 555 services, one never would know what kind of service would end up with the number next door. Toll Free services also require 1+10 digits, which would mean callers would have to remember a long number, not a short one. They would be asked to remember a number that is no more unique than the number they call to get customer service from any service provider, from the local glass repair service, to buying tickets to the latest show.

From the standpoint of pricing, in most areas a tariff is already in place for toll free. Many if not all of these tariffs are usage based, which means the more users, the lower the rate per call. This in fact, could be detrimental to smaller areas or areas with fewer users. An area the size of Washington DC would certainly have lower per minute rates for the service provider. But what of Rhode Island, where even the population dictates that there would be fewer users. Or compare

the size and user base of the tri-state area of New York, Connecticut and New Jersey to Portland Maine.

As for the technical requirements, they would also have to follow existing guidelines which could be a nightmare unto themselves. In an area such as Washington DC, even though the LATA encompasses two states and the District of Columbia, it is still *one LATA*. In other words, a Toll Free number could be carried by an Local Exchange Carrier. But in areas such as Philadelphia, and many others, the local traveler information market extends well beyond the LATA. The Philadelphia market quickly crosses the Delaware River and into New Jersey. For this, one would have to have *both* a local Toll Free provider *and* a long distance carrier to provide service. Another existing tariff would come into play, and would need to be negotiated, fighting the tide against existing rates and structures.

I do realize that the Commission has not been asked to address pricing issues, and could well create guidelines or suggest them to the local PUCs, but where a tariff already exists it could prove more difficult creating an exception than starting from scratch with an N11.

Finally on the matter of 800/888/877 service, though the Commission has not been asked to specifically address wireless/cellular users, designating a traditional Toll Free number might have those users dialing *more* digits than they have to dial even now. I noted that programmable phones can be the answer to some, and there would be a national standard, but it would be no different than any other number, service or not, government sponsored or otherwise. Perhaps, a new tariff could be created using an 800/888/877 backbone for N11, so the calls could be routed to the appropriate ATIS operations center, but using the abbreviated N11 as the access point. Again, this special designation would allow the tariff to be created from scratch instead of implementing against the tide.

Implementation

As noted above, the question that has been raised is how the number would be implemented or paid for. It is our opinion that this is not an issue that the FCC should be asked to address. There are technical issues to deal with as to where the call center or service center might be located, and how calls would be transferred both inter-LATA and intra-LATA depending on the market. But these are matters that the FCC might not choose to deal with.

Instead local pricing might be left to local Public Utilities Commissions with input from local telephone companies, Departments of Transportation and the USDOT, or other assignee as designated by the FCC. The FCC might make strong recommendations, but need not be involved in a mandate should it choose not to. Some might view the tariff assigned by the local RBOC in Cincinnati/Northern Kentucky as in need of review, especially after an N11 assignment by the FCC. Again, this can be viewed as a local issue, though the Commission may choose to acknowledge the issue, and recommend that the recipient of the N11 assignment, the USDOT, address it to level the playing field.

There will be issues of Standards and Baseline Information Requirements that these ATIS services must meet before they are allowed to connect through, or are assigned the use of the N11 number by the assignee. These are issues that the FCC might choose not to address, but

considering the information currently available through ATIS services (noted above), the FCC might encourage the assignee to establish baseline standards before deploying the N11 for use.

By assigning an N11 number to ATIS services, the FCC could also assign a burden to the assignee to set up standards and requirements that ATIS service providers must meet in order to be allowed to use the N11.

Conclusion

It is our belief that the Federal Communications Commission should accept the petition and assign an N11 Abbreviated Dialing Code to Advanced Traveler Information Systems Services as requested by the United States Department of Transportation.

Sincerely,

Eli Sherer
Vice President of Operations
SmartRoute Systems Inc.